



Working in the Pandemic: Evaluating User-Factors in Zoom Meeting App Usage among the Academic Staff of Selected Tertiary Institutions in Anambra State, Nigeria

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Abstract

The pandemic created a number of challenges in the workplace; to adapt to the workplace in the face of the pandemic threat, there is need to de-emphasize human contact and embrace digital technology. This study therefore evaluated the user human factor challenges which abound in the use of digital technology typically Zoom meeting app to manage workplace communication and routines. Zoom meeting is designed to provide a contactless tele-conference and online gathering, adjudged to be beneficial especially in this COVID-19 pandemic; however, their usage has remained poor among Nigerians. The design utilized correlation design to evaluated 229 lecturers (81 males and 48 females) whose ages ranged from 25 to 60 years with an average age of 47yrs were sample with a multi-stage sampling technique. The result indicated that correlation among human factors factor was significant with behavioural intention to use webinar while beta weight coefficient analysis of the human factors (anxiety, facilitating conditions and attitude towards technology) were confirmed in model 3 as predictors of behavioural intention to use webinar at $\beta(3, 226) = -.29, .40$ and $.31, p < .05$ respectively as reported in the joint model 3. It is recommended that stakeholder invest in attitudinal change in order to improve on behavioural intention to use webinar and other related technology.

Key Words: Coronavirus, covid-19 pandemic, human factors media, resource sharing, webinar, zoom meeting

Introduction

Human development is continuous and enduring; new technologies replace older ones and human beings continue to adjust themselves to the realities of these technologies and deploy them to their everyday lives (Lee & Lyu 2016). Critically, the greatest human development could be said to be the jet age which gave birth to digitalization and the use of information and communication technology as tool for social interaction such as the notable zoom meeting app. Educational infrastructure has remained problematic notwithstanding the efforts of Federal Government of Nigeria to improve on critical infrastructure; this is as a result of many multi-faceted factors including corruption (Ezeh & Etodike, 2017) and low funding in

education. Thus, there is critical poor infrastructural provision in almost all tiers of education (primary, secondary and tertiary) and this have also affected teachers' exposure to the use of certain infrastructure especially those that are ICT driven such as online platforms for resource sharing e.g. zoom meetings. In view of the pandemic challenges, this has often increased user challenges especially in the absence of alternatives to technologically driven gadgets and tools used in everyday life. Given this problem, the current study is an attempt to evaluate predictive human factors to the use of zoom meetings and webinars as challenges of technology use among academic staff in selected tertiary institutions in Anambra State.

According to Hazzam and Lahrech (2018), most technologies which are replacing out old system of doing things require in essence tech-skills to operate them. Most tech skill for using social media platforms essentially require knowledge of the computer and mobile gadgets especially its operational system as may be adaptable to other visual interfaces. This know-how or tech skill is the major determinant of technology acceptance and patronage by users and it is a factor that is much dependent on individual differences from one user to another (Chen & Lan, 2018). With the support of the organization, workers are likely to experience anxiety in workplace (Oguebe et al., 2017) especially with the introduction and usage of new technology. Also, employees may not thrive without proper deployment of technology (Okechukwu et al., 2021) especially among newbies (Joe-Akunne et al., 2019). Also, technology has helped in the fulfillment of psychological contract with easy of work (Etodike et al., 2020). Considering this, the current investigation is interested in ascertaining how much of these individual human factors predict the usage and patronage of zoom meetings an webinars as technology alternatives to physical meetings and physical information and communication especially their this era of covid-19 pandemic which necessitate global lockdown as a measure to reduce the spread of the deadly virus. The consequences of the lockdown implied that interactions remain contact-less (Etodike et al., 2021) with online interaction such as social media, zoom-meetings and webinars becoming ideals.

Review

COVID-19 Pandemic

The acute respiratory syndrome coronavirus 2 (SARS-CoV-2) popularly referred to as COVID-19 which causes mild illnesses like: high fever, headache, cough and pneumonia etc was discovered in China by late November, 2019 by World Health Organization (Núñez-Delgado, 2020). Initial efforts to contain the virus and its consequent wide spread to other parts of the world failed largely due to lack of transparency by the handlers. COVID-19 is a contact disease and thus, the spread is rapid although it is not an airborne infection. With the disease being highly contagious, the disease became a pandemic spreading all over the world (WHO, 2020). The situation caused global health crises without any cure in sight leading to lockdown measures aimed at limiting human physical activities which required public isolation of people or close contacts of the people as measures contain the spread and reduce the case-fatality-ratio (CFR). The implication of the lockdown measures among others things limited human physical interactions and information sharing and thus created difficulties in human exchange especially in the workplace (Omer at

al., 2020). Hence, virtual and contact-less platforms such as social media platforms, the internet and blogging sites became the mediums of daily interaction. For the academic staff in tertiary institutions to keep pace with their career requirements, online mediums became inevitable, notably zoom meetings (Taylor et al., 2020).

ICT and Social Media

Social media is boom thanks to ICT which has catalyzed the digital era and brought numerous advancements such as online learning. According to Al-Zahrani (2015), Bousbahi and Alrazgan (2015) and Yıldız et al., (2015) the integration of online capabilities into education has changed how we can learn from and interact with learning materials and with each other. Online venues have been widely used to deliver learning materials to support and enhance faculty members and the public simultaneously (Ageel & Woollard, 2012; Al-Harbi, 2011; Al-Hattami et al., 2013). This idea is reiterated by Rienties et al. (2013) and Yang and Lin (2011), who agreed that technological advancement in institutions of higher education, should be met with changes in its system. The use of web-based technologies is significant to institutions because they help promote learning, interaction and resource sharing in an environment that is not hindered by geographical barriers and these has impacted both offline and online digital meetings. meetings

Quite a number useful utility has been derived from the ICT boom including; webinars, short for web-based seminars, can be used to transmit presentations, workshops, and other learning materials through features such as video and audio communication (Malik et al., 2015; Yıldız et al., 2015). The key components associated with webinars are the interactive elements, such as video and audio that, have the ability to disperse and receive as well as promote discussion of the information in real time. Webinars have become an important component for delivering professional development content (Yates, 2014; Yoo et al., 2012) because they make learning across time and space possible (Yıldız et al., 2015). Using 4 this tool, the participants are able to share their audio, documents, and applications with the other webinar attendees (Elliott et al., 2015; Malik et al., 2015).

Zoom Meetings

The various social media platforms have remained the truest ICT invention owing to its power to influence the members of the platform on/off line and interconnecting people from the remotest parts of the world. The deployment of Web 2.0 popularly called social media networks would have been elusive if not for the availability and affordability of mobile telephone in form of smart phone and other devices which may be interchangeably used as connection devices to the internet. Lanre-Babalola (2018) contended that smart phone evolution courtesy of Andriod open market lunch in 2004 has forever propelled development and easy life style. This is because of their (smart phones) ability to perform certain function which greatly influences human behaviour such as texting, audio, and video, media sharing and conferencing tools through the platforms such as; Zoom meetings, Webinars, Facebook, Twitter, WhatsApp, Instagram, Badoo, LinkedIn, Wechat etc. This further made possible by the easy of connection and the population of subscribers which many have capitalized on in the use of online media

channels for sharing varying degrees of messages in form of texts, audio admonitions, video persuasions and other media files to the public (Ifeakandu, 2013).

Zoom is a short name for zoom video communications which provides video telephony and online chat services through a cloud-based peer-to-peer software platform and is used for teleconferencing, telecommuting, distance education, and social relations (Taylor, Erin, & Mike, 2020). By default, the Zoom mobile app displays the active speaker view. If one or more participants join the meeting, you will see a video thumbnail in the bottom-right corner. Swipe left from the active speaker view to switch to gallery view. You can view up to 4 participants' video at the same time. On the other hand, a webinar is an online event that is hosted by an organization/company and broadcast to a select group of individuals through their computers via the Internet (Byrd, 2020). A webinar is sometimes also referred to as a "webcast", "online event" or "web seminar" and characteristically differ from video telephony services which offer both real video footage of presenters and the a number of audience simultaneously. Sometimes it may be used also in the more narrow sense of the peer-level web meeting context, in an attempt to disambiguate it from the other types known as collaborative sessions (Daniel, 2018). The terminology related to these technologies is exact and agreed relying on the standards for web conferencing but specific organizations practices in usage exist to provide also term usage reference. In general, web conferencing is made possible by Internet technologies, particularly on TCP/IP connections. Services may allow real-time point-to-point communications as well as multicast communications from one sender to many receivers (Byrd, 2020). It offers data streams of text-based messages, voice and video chat to be shared simultaneously, across geographically dispersed locations. Applications for web conferencing include meetings, training events, lectures, or presentations from a web-connected computer to other web-connected computers.

Theoretical framework

Framework for understanding this study will be guided by technology acceptance model (TAM). TAM explores how perceived usefulness and perceived ease of use would predict users' intention to use new educational technology. TAM is intended to explain users' behavioral intention to use new systems. This model suggests that when the users are presented with a new technology, there are a number of 6 factors that may influence their decision of how and when they will use it (Davis, 1989). TAM includes two main constructs, namely, perceived usefulness and perceived ease of use, to measure the intention to use new technology. Perceived usefulness is defined as "the degree to which an individual believes that using a particular system would enhance his or her job performance" (Davis, 1989). Perceived ease of use is defined as "the degree to which an individual believes that using a particular system would be free of effort" (Davis, 1989).

Technology acceptance and adoption are different in diverse sectors. Recently, most institutions have introduced technology-empowered learning, or a teaching paradigm, to improve educational quality (Buchanan, Sainter, & Saunders, 2013; Chang, Lieu, Liang, Liu, & Wong, 2011; John, 2015; King & Boyatt, 2015; Marangunić & Granić, 2015; Nistor et al., 2014; Suri & Sharma, 2013; Teo, 2010). For

instance, Chang et al. (2011) conducted a study to identify the behavioral intentions of instructors at the university regarding the acceptance of overhead projectors as a new technology. Chang et al.'s (2011) findings showed that perceived usefulness had significant positive influences on the instructors' behavioral intention, but the perceived ease of use did not influence the intention of instructors. On the other hand, a study conducted by Teo (2010) focused on the key players in the integration of technologies used in the education sector. Teo's (2010) results do not support the results of other studies (Chang et al., 2011; John, 2015; Nistor et al., 2014). Those studies concluded that future studies should explore the integration of technology in other sites and with different populations. Also, they emphasized that other researchers should involve other variables, such as gender, which might influence users' behavioral intention to use technology. For example, Park (2009) and Khechine et al. (2014) argued gender plays a significant role in influencing users' intention to use technology thereby establishing that human factors affect the behavioural intention to use any technology. Based on all of the previously discussed studies, it can be concluded that the technology acceptance model (TAM) has undergone extensive validation, which will help answer the research questions for the current study.

Given the recommendation in literature, user studies for webinar will be conducted guided by under the following research question:

1. What are the human factors in webinar usage which predict behavioural intention to use webinar as an alternative to seminars?

Method

Participants - Inclusion criteria for the study comprised participants who are academic staff of any tertiary institution in domiciled in Anambra State and have taught at least for one year with the tertiary institution (the period allows for institutional influence). Considering the nature of the population, multi-stage sampling technique was employed in selecting the participants; purposive was used in selecting the tertiary institutions in the State, cluster sampling was used in selecting the participants' departments whereas simple randomization was utilized to select the final participants to the user study. The population of the study constituted 3800 academic staff from tertiary institutions in Anambra State. A total of 233 lecturers (85 males and 48 females) whose ages ranged from 25 to 60 years with an average age of 47yrs participated in the study.

Design - The design of the study was correlation design while the area of the study was Anambra State, Nigeria.

Measures - The instrument titled "Human Factors in the Use of Zoom" (HFUZ) (Appendix1) was developed by the researcher and was structured on a five-point Likert rating scale of Strongly Agree (SA-5points), Agree (A-4points), Neutral (N-3points), Disagree (D-2points) and Strongly Disagree (SD-1point). The instrument contained 17 items and was the internal consistency of the scale was established during a pilot test. Reliability of the instrument was established using Pearson Product Moment Correlation and coefficient between the first test and the re-test using 31 participants. A correlation value of $r = 0.86$ was obtained (Appendix 2) indicating the reliability of participants' responses between the first test and re-test after a three weeks interval period.

Procedure

There was a pilot test before the main study to validate and establish reliability measures of the instrument for data collection to ensure that it measures what it ought to measure and reliable over time. The pilot test was conducted via WhatsApp social media which contain groups for different academic staff association domiciled in Anambra State. The questionnaire was distributed via this platform and instructions on how to participate in the survey was provided. The participants completed the questionnaire and returned it electronically through WhatsApp social media. The same method was adopted in the main study. For the descriptive study, mean cut-off score was 3.00 and above based on the rating scale ($5+1 = 6/2 =$) was accepted as positive while mean scores below 3.00 was rejected. Stepwise regression analysis was used to test user factors for behavioural intention to use webinar.

Result

Table1. Zero Order Inter-item Correlation Matrix

	PE	EE	AT	SI	FC	SE	Ax	BI
Performance Expectancy (PE)	1							
Effort Expectancy (EE)	.485**	1						
Attitude to Technology (AT)	.488**	.850**	1					
Social Influence (SI)	.390*	.817**	.811**	1				
Facilitating Condition (FC)	.408*	.667**	.664*	.605**	1			
Self-efficacy (SE)	.445**	.624**	.507**	.539**	.339*	1		
Anxiety (AX)	-.480**	-.779**	-.771**	-.712**	-.745**	-.565**	1	
Behavioural Intention (BI)	.530**	.789**	.797**	.654**	.819**	.500**	-.824**	1

*Significant at $p < 0.05$, **significant at $p < 0.01$, $n=233$

Inter item correlation (Table 1) is indicative that significant correlations were observed among the human factors on behavioural intention to use webinar thus paving way for regression testing using stepwise regression.

Table 2 Model summary indicating a.R² predictive contribution of user factors on behavioural intention to use webinar

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.824 ^a	.679	.674	1.31417	.679	141.415	1	67	.000
2	.880 ^b	.774	.767	1.11100	.095	27.746	1	66	.000
3	.901 ^c	.811	.803	1.02219	.038	12.966	1	65	.001

a. Predictors: (Constant), Anxiety

b. Predictors: (Constant), Anxiety, Facilitating Conditions

c. Predictors: (Constant), Anxiety, Facilitating Conditions, Attitude Towards Use of Webinar

d. Dependent variable: Behavioural Intention to Use Webinar

Preliminary result of the user studies (for predictor contributions) as indicated by adjusted R² produced 3 models (a,b,c) as predictors of behavioural intention to use webinar (BIW) with anxiety (AX) contributing 67.4% (a.R² =.674) explanation of user factors which predict BIW. When

facilitating conditions (FC) was added to the previous yielding model 2, predictability as shown by $a.R^2$ increased to .767 an indication that facilitating conditions (FC) contributed 9.5% independent explanation to the user factors. Furthermore, in model 3, participants' attitude towards technology (AT) also proved to be an important user factor to BIW as it contributed 3.8% explanation to the user factors at $a.R^2 = .803$. The $a.R^2$ change was equally confirmed at $p < .05$ respectively for the 3 model contributions. Although, PE, EE, SE and SI correlated positively with BIW, they were excluded in the accepted model (model 3) as correlation did not have predictive level with BIW (Appendix II). Given these outputs, and to accept the model factors as predictors, beta weight coefficient analysis was further performed and the result was reported as follows:

Table 3 Beta Weight Coefficient Analysis

Coefficients ^a					T	Sig.
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	15.251	.471		32.355	.000
	Anxiety	-.615	.052	-.824	-11.892	.000
2	(Constant)	7.176	1.584		4.530	.000
	Anxiety	-.358	.066	-.480	-5.469	.000
	Facilitating Conditions	.596	.113	.462	5.267	.000
	(Constant)	4.111	1.688		2.436	.018
3	Anxiety	-.214	.072	-.287	-2.957	.004
	Facilitating Conditions	.514	.106	.399	4.829	.000
	Attitude Towards Use of Technology	.265	.074	.312	3.601	.001

a. Dependent Variable: Behavioural Intention to Use Webinar

Testing the 3 models for significant predictive effects on behavioural intention to use webinar, beta weight coefficient analysis revealed that the user factors (anxiety, facilitating conditions and attitude towards technology) as confirmed in model 3 of the model summary (Table 3) significantly predicted behavioural intention to use webinar at $\beta(3, 66) = -.29, .40$ and $.31, p < .05$ respectively as reported in the joint model 3. Whereas anxiety yielded significant but negative (inverse) predictive effects on behavioural intention to use webinar; facilitating conditions and attitude towards technology produced significant and positive (proportional) predictive effects on behavioural intention to use webinar. Thus, the result confirmed the independent predictive effects of anxiety, facilitating conditions and attitude towards technology as predicting user factors of participants' behavioural intentions to use webinar. The findings imply that while increase in academic staff's anxiety predicted low behavioural intention to use webinar; however, with improving facilitating conditions and academic staff's positive attitudinal change towards technology, predict high behavioural intentions to use webinar among the officers.

Discussion

Findings revealed that the respondents' anxiety is the largest contributory factor which predicted intention to use webinar which is detrimental to the call for a contact-less method of information exchange and resource sharing such as the use of webinars. Anxiety and other personality factors appears to affect technology knowledge and zeal to use them and this is not good for a period of search alternative and contact-less medium for information exchange and resource sharing as required for safety during this pandemic necessitated by the lockdown. This is in line with Vázquez-Cano, Meneses and García-Garzón's (2017) study which found that human factors such age, gender, anxiety etc affect the use of technology. Anxiety affects ICT knowledge and usage and affects intention to use mentally and otherwise. Such anxiety may be caused by poor or lack of infrastructure to use the technology. This is also supported by van derKaay and Young (2012) who found that using same or similar technology there is human factors in the use of technology; for instance, the authors found that there is age-related differences in technology usage in favour younger users

Also, facilitating condition showed positive and significant predictive effects indicating that with favourable environmental conditions behavioural intention to use webinar will increase. This is typically in line with the findings of Adeola and Evans (2020) which identified problems such as poor electric power supply to charge technology gadgets, lack of funds to subscribe to network data and poor operation know-how of the platform among others as challenges affecting the utility of technology driven platforms as alternatives during the lockdown.

As regards the predictive effects of attitude towards the use of technology on behavioural intention to use webinar as human factors in the use of technology, Charness, Boot, Evans, Best, Taha, Sharit, and Czaja (2017) that attitude varies across age differences in technology usage. Both anxiety and facilitating conditions greatly, influence behavioural intention to use webinar and they shape users attitude to using webinar. This is because those who have anxiety are less likely to have positive attitude towards behavioural intention to use webinar, thus, anxiety reduce their motivation to use the technology. This is supported by Wolf (2020) who found that adopting new technology with its own psychological hassles and stress which may affect the attitude of users and reduce their interest. Poor attitude which are cause by unattractive or negative motivation usually leads to low intention to use technology.

Implication of the Study

The expected impacts of contactless technology in resource sharing during the pandemic may not be actualized as a result of human factors. Human factors determine many outcomes including attitude towards the use of technology such as webinar. It is important therefore that stakeholders invest

considerably in attitudinal changes rather than investing only on infrastructure and other resources. With greater investment in human factors, technology users will increase.

Recommendations

The authorities and stakeholders in education need to invest to improve human factors to the use of technology. There is need for regular training and retraining of staff on core technology usage in order to eliminate anxiety and attitudinal problems towards the use of webinar and other related technologies. This will increase efficiency and effectiveness across tertiary institutions in Nigeria.

References

- Adeola, O., & Evans, O. (2020). ICT, infrastructure, and tourism development in Africa. *Tourism Economics*, 26(1), 97-114.
- Ageel, M., & Woollard, J. (2012). Enhancing university teachers' information and communication technology usage by using a virtual learning environment training course. In, 6th International Technology, Education and Development Conference, INTED2012, Valencia, ES, 05-07 Mar 2012.
- Al-Harbi, K. A. S. (2011). E-learning in the Saudi tertiary education: Potential and challenges. *Applied Computing and Informatics*, 9(1), 31-46.
- Al-Hattami, A. A., Muammar, O. M., & Elmahdi, I. A. (2013). The need for professional training programs to improve faculty members teaching skills. *International Association of Social Science Research*, 1(2), 39-45.
- Al-Zahrani, A. (2015). The place of technology integration in Saudi pre-service teacher education: Matching policy with practice. *TOJET: The Turkish Online Journal of Educational Technology*, 14(1).
- Bousbahi, F., & Alrazgan, M. S. (20015). Investigating IT faculty resistance to learning management system adoption using latent variables in an acceptance technology model. *The Scientific Worlds Journal*, 2015, 1-11. <http://dx.doi.org/10.1155/2015/375651>
- Buchanan, T., Sainter, P., & Saunders, G. (2013). Factors affecting faculty use of learning technologies: Implications for models of technology adoption. *Journal of Computing in Higher Education*, 25(1), 1-11.
- Byrd, N. (2020). Online Conferences: Some History, Methods, and Benefits. In *Right Research: Modelling Sustainable Research Practices in the Anthropocene*. Open Book Publishers. <https://doi.org/10.7939/r3-q6mq-0004>
- Chang, J., Lieu, P., Liang, J., Liu, H. and Wong, S. (2011). Factors influencing technology acceptance decisions. *African Journal of Business Management*, [online] 5(7), pp.2901- 2909. Available at: <http://www.academicjournals.org/AJBM> [Accessed 21 Mar. 2018].
- Charness, N. H., Boot, W. R., Evans, J., Best, R., Taha, J., Sharit, J., & Czaja, S. J. (2017). Constraints on telehealth adoption and use by older adults. *Innovation in Aging*, 1(suppl_1), 1026-1026.
- Chen, Y. F., & Lan, Y. C. (2018). An empirical study of the factors affecting mobile shopping in Taiwan. In *Mobile Commerce: Concepts, Methodologies, Tools, and Applications* (pp. 1329-1340). IGI Global.
- Daniel, J. (2018). CoolTalk: More Than an Internet Telephone. *Berkeley School of Information*. UC Regents. Retrieved 10 September, 2020.

- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319-340.
- Elliott, M., Rhoades, N., Jackson, C. M., & Mandernach, B. J. (2015). Professional development: Designing initiatives to meet the needs of online faculty. *Journal of Educators Online*, 12(1), 160-188.
- Etodike, C.E., Ekeghalu, E.C., Ani, K.J. & Mutambara, E. (2021). Covid-19 Fatality Rate in Third World Countries: A Review of Environmental Challenges and Impacts on Public Health and Human Security. *Journal of Intellectual Disability - Diagnosis and Treatment*, 2021, 9, 39-44 <https://doi.org/10.6000/2292-2598.2021.09.01.5>
- Etodike, C.E., Joe-Akunne, C.O. & Obibuba, I. M (2020). Employee Deviance as By-product of Psychological Contract: The Moderating Effects of Power Distance among Employees in Insurance Companies in Nigeria. *Asian Journal of Arts & Social Sciences*, 10(4), 44-54 DOI: 10.9734/ARJASS/2020/v10i430157 <http://journalarjass.com/index.php/ARJASS/article/view/430157>
- Ezeh, L.N & Etodike, C.E. (2017). Corruption in Nigeria organizations: theories & implications. In *Proceedings of Annual Scientific Conference of NPA, Promotion of Peaceful and Inclusive Societies for Sustained Development through Psychology held at Nnamdi Azikiwe University Awka, Nigeria, 11th – 14th Oct.2016* In H. Osinowo., A. Zamani., H. Obi-Nwosu., O.L. Afolabi., & C.E. Nwafor (eds.). 87-100. Peace, Inclusive Societies and Psychology.
- Goswami, A., & Dutta, S. (2015). Gender differences in technology usage—a literature review. *Open Journal of Business and Management*, 4(1), 51-59.
- Hazzam, J., & Lahrech, A. (2018). Health care professionals' social media behavior and the underlying factors of social media adoption and use: Quantitative study. *Journal of medical Internet research*, 20(11), e12035.
- Hossain, N., Yokota, F., Sultana, N., & Ahmed, A. (2019). Factors influencing rural end-users' acceptance of e-health in developing countries: a study on portable health clinic in bangladesh. *Telemedicine and e-Health*, 25(3), 221-229.
- Joe-Akunne C.O., Etodike, C.E., & Okonkwo. K.I. (2019). Social Dynamics in the Workplace: Does Social Support Enhance Thriving at Work of Newbie Employees in the Private Sector? *Asian Journal of Advanced Research and Reports*, 6(1), 1-9. <http://journalajarr.com/index.php/AJARR/article/view/30145>
- John, S. P. (2015). The integration of information technology in higher education: A study of faculty's attitude towards IT adoption in the teaching process. *Contaduría y Administración*, 60, 230-252
- Kalolo, J. F. (2019). Digital revolution and its impact on education systems in developing countries. *Education and Information Technologies*, 24(1), 345-358.
- Karaali, D., Gumussoy, C. A., & Calisir, F. (2011). Factors affecting the intention to use a webbased learning system among blue-collar workers in the automotive industry. *Computers in Human Behavior*, 27(1), 343-354.
- Khechine, H., Lakhal, S., Pascot, D. & Bytha, A. (2014). UTAUT model for blended learning: the role of gender and age in the intention to use webinars. *Interdisciplinary Journal of ELearning and Learning Objects*, 10, 33-52, Retrieved from <http://www.ijello.org/Volume10/IJELLOv10p033-052Khechine0876.pdf>

- King, E., & Boyatt, R. (2015). Exploring factors that influence adoption of e-learning within higher education. *British Journal of Educational Technology*, 46(6), 1272-1280.
- Lanre-Babalola, F.O. (2018). Media Use and Sexual Behavior: A Study of Adolescents in Selected Secondary Schools in Ede, Osun State. *Arts Social Science Journal* 9, 319-328. doi:10. 4172/2151-6200.1000319
- Lee, A., Yoo, H., Chun, M. S., & Cho, E. M. (2014). Health information seeking behaviors among persons with cancer disease. *Korean Journal of Health Education and Promotion*, 31(5), 1-11.
- Lee, H. J., & Lyu, J. (2016). Personal values as determinants of intentions to use self-service technology in retailing. *Computers in Human Behavior*, 60, 322-332.
- Lenhart, A., Purcell, K., & Smith, A. (2010). Social media and mobile Internet use among teens and young adults. Pew Internet and American Life Project, USA.
- Malik, M., Umar, I. N., Salbani, A. M., & Yahaya, W. A. J. W. (2015). The acceptance of webinars as a training tool among engineers. *Procedia-Social and Behavioral Sciences*, 197, 1759-1766.
- Marangunić, N., & Granić, A. (2015). Technology acceptance model: A literature review from 1986 to 2013. *Universal Access in the Information Society*, 14(1), 81-95.
- Merat, N., Madigan, R., & Nordhoff, S. (2017). Human factors, user requirements, and user acceptance of ride-sharing in automated vehicles. ISSN: 2223439X (online) <https://doi.org/10.1787/2223439X>
- Morris B. Why does Zoom exhaust you? Science has an answer. <https://www.wsj.com/articles/why-does-zoom-exhaustyou-science-has-an-answer-11590600269> (accessed June 2, 2020).
- Nistor, N., Baltes, B., Dascălu, M., Mihăilă, D., Smeaton, G., & Trăuşan-Matu, Ş. (2014). Participation in virtual academic communities of practice under the influence of technology acceptance and community factors. A learning analytics application. *Computers in Human Behavior*, 34, 339-344.
- Núñez-Delgado, A.N. (2020). What do we know about the SARS-1 CoV-2 coronavirus in the environment? *Sci. Total Environ.*, 727, [10.1016/j.scitotenv.2020.138647](https://doi.org/10.1016/j.scitotenv.2020.138647)
- Oguegbe, T.M., Etodike, C.E. & Ugwa, R. (2017). Perceived supervisor's support and job insecurity as predictors of employee anxiety. *Unizik Journal of Arts and Humanities*, (Special Edition), 450-465. <http://dx.doi.org/10.4314/ujah.v18i2.26>
- Omer, S. B., Malani, P., & Del Rio, C. (2020). The COVID-19 pandemic in the US: a clinical update. *Jama*, 323(18), 1767-1768.
- Okechukwu, R. N. ., Joe-Akunne, C. O., & Etodike, C. E. (2021). Work Resilience, Core Self-Evaluation and Organizational Creativity as Predictors of Thriving at Work among Bank Employees in Owerri Municipal. *Practicum Psychologia*, 11(1). Retrieved from <https://journals.aphriapub.com/index.php/PP/article/view/1340>
- Park, S. Y. (2009). An analysis of the technology acceptance model in understanding university students' behavioral intention to Use e-learning. *Educational Technology & Society*, 12(3), 150-162.
- Rauniar, R., Rawski, G., Yang, J., & Johnson, B. (2014). Technology acceptance model (TAM) and social media usage: an empirical study on Facebook. *Journal of Enterprise Information Management*, 27(1), 6-30.
- Reinach Wolf C. Virtual platforms are helpful tools but can add to our stress. <https://www.psychologytoday.com/ca/blog/the-desk-the-mental-health-lawyer/202005/virtual-platforms-are-helpful-tools-can-add-our-stress> (accessed June 2, 2020).

- Rienties, B., Brouwer, N., & Lygo-Baker, S. (2013). The effects of online professional development on higher education teachers' beliefs and intentions towards learning facilitation and technology. *Teaching and Teacher Education*, 29(1), 122-131
- Surendran, P. (2012). Technology Acceptance Model: A survey of literature. *International Journal of Business and Social Research (IJBSR)*, 2(4), 175-178.
- Suri, G., & Sharma, S. (2013). The impact of gender on attitude towards computer technology and e-learning: An exploratory study of Punjab University, India. *International Journal of Engineering Research*, 2(2), 132-136.
- Taylor, L., Erin, G., & Mike, I. (2020). *We live in Zoom now*. The New York Times. ISSN 0362-4331
- Teo, T. (2010). Factors influencing teachers' intention to use technology: Model development and test. *Computers & Education*, pp.12-25.
- Tiem, D. V., Moseley, J. L., & Dessinger, J. C. (2012). *Fundamentals of performance improvement: Optimizing results through people, process and organizations* (3rd ed.). New York, NY: John Wiley & Sons.
- van derKaay, C. D., & Young, W. H. (2012). Age-related differences in technology usage among community college faculty. *Community College Journal of Research and Practice*, 36(8), 570-579.
- Vázquez-Cano, E., Meneses, E. L., & García-Garzón, E. (2017). Differences in basic digital competences between male and female university students of Social Sciences in Spain. *International Journal of Educational Technology in Higher Education*, 14(1), 27.
- Yang, S.C., & Lin, C.H. (2011). The effect of online training on employee's performance, *Journal of Computers*, 6(3), 458-465.
- Yates, J. (2014). Synchronous online CPD: Empirical support for the value of webinars in career settings. *British Journal of Guidance & Counseling*, 42(3), 245-260.
- Yıldız, E., Sarıtaş, M. T., & ŞENEL, H. C. (2015). Examining the attitudes and intention to use synchronous distance learning technology among pre-service teachers: A qualitative perspective of technology acceptance model. *American Journal of Educational Research*, 3(10A), 17-25.
- Yoo, S. J., Huang, W. H., & Lee, D.Y. (2012). The impact of employee's perception of organizational climate on their technology acceptance toward e-learning in South Korea. *Knowledge Management & E-Learning: An International Journal*, 4(3), 359-378.

Appendix I

Instruction - You are required to indicate the degree of your agreement or disagreement to the number of statements which you are familiar with. For the scale, strongly agree, agree, undecided, disagree and strongly disagree has the scores 5, 4, 3, 2 and 1 response items respectively.

S/N	ITEMS	5	4	3	2	1
	Performance Expectancy (PE)	5	4	3	2	1
1.	Zoom meeting is beneficial to overall education system	5	4	3	2	1
2.	Zoom meeting will allow effective resource sharing	5	4	3	2	1
3.	Zoom meeting will increase communication efficiency	5	4	3	2	1
4.	Zoom meeting reduces physical limitations	5	4	3	2	1
5.	Zoom meeting ensures more effectiveness	5	4	3	2	1

	Effort Expectancy (EE)	5	4	3	2	1
1.	Use Zoom meeting is simple and understandable	5	4	3	2	1
2.	Zoom meeting application is easy and user friendly	5	4	3	2	1
3.	It is easy to gain mastery of the Zoom meeting with a short time	5	4	3	2	1
4.	Operating Zoom meeting application has simple procedures	5	4	3	2	1
5.	Webinar saves me time to attend to other responsibilities	5	4	3	2	1
	Attitude Towards Use of Technology (AT)	5	4	3	2	1
1.	Zoom meeting is a brilliant idea	5	4	3	2	1
2.	The features of Zoom meeting application such as notification make its use interesting	5	4	3	2	1
3.	Using Zoom meeting interactive mechanisms is fun	5	4	3	2	1
4.	Zoom meeting helps me to work better	5	4	3	2	1
	Social Influence (SI)	5	4	3	2	1
1.	My colleagues at work think using Zoom meeting is a great idea	5	4	3	2	1
2.	My superiors are suggestive of the use of Zoom meeting	5	4	3	2	1
3.	Colleagues feel that the use of Zoom meeting saves them time	5	4	3	2	1
4.	Colleagues feel Zoom meeting is transparent and thus suggest its use	5	4	3	2	1
	Behavioural Intention to Use the System (BI)	5	4	3	2	1
1.	I intend to use Zoom meeting in the future	5	4	3	2	1
2.	I will like to use Zoom meeting when it is available	5	4	3	2	1
3.	I plan to maximize the features of Zoom meeting for greater efficiency in my work	5	4	3	2	1
	Facilitating Conditions (FC)	5	4	3	2	1
1.	I use smart phone	5	4	3	2	1
2.	I have internet services for work	5	4	3	2	1
3.	I can navigate with ease through such applications	5	4	3	2	1
4.	Webinar application is compatible with smart phones	5	4	3	2	1
5.	I have steady power supply	5	4	3	2	1
6.	I can access help easily within the organization if I have difficulty with webinar	5	4	3	2	1
	Self-Efficacy (SE)					
1.	I can use webinar even without assistance	5	4	3	2	1
2.	With webinar, I can complete computation and send notification	5	4	3	2	1
3.	If I need assistance for something unusual in webinar, I will definitely ask	5	4	3	2	1
4.	With user guide, my learning experience of webinar is facilitated	5	4	3	2	1
5.	I trust myself to be able to navigate difficult functions associated with webinar	5	4	3	2	1
	Anxiety (AX)					
1.	I am nervous about making mistakes while using Zoom meeting	5	4	3	2	1
2.	Zoom meeting feels awkward, I may never get used to it	5	4	3	2	1
3.	I am afraid of making mistakes in Zoom meeting may affect my job	5	4	3	2	1
4.	I am scared because I may lose information using Zoom meeting application	5	4	3	2	1